

PRELIMINARY AMENDMENT

Appln No.: Not Yet Assigned

Attorney Docket No.: Q71952

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original): A method for producing a filled skutterudite-based alloy, comprising:

melting alloy raw material comprising a rare earth metal R that is at least one species selected from among La, Ce, Pr, Nd, Sm, Eu and Yb, a transition metal T that is at least one species selected from among Fe, Co, Ni, Os, Ru, Pd, Pt and Ag, and metallic antimony Sb to form a melt; and

rapidly quenching the melt through strip casting to form a solidified product.

2. (original): The method according to claim 1, wherein the alloy raw material is melted at a temperature of 800 to 1,800°C, and the melt is rapidly quenched at a cooling rate of 10^2 to 10^4 °C/second, as measured within a range of a temperature of the melt to 800°C.

3. (currently amended): The method according to claim 1 ~~or claim 2~~, wherein the alloy raw material is melted in an inert gas atmosphere at a pressure higher than atmospheric pressure of 0.1 MPa and not higher than 0.2 Mpa.

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4. (currently amended): The method according to claim 1 ~~any one of claims 1 to 3~~, wherein the solidified product comprises alloy strips having a thickness of 0.1 to 2.0 mm.

5. (currently amended): A filled skutterudite-based alloy produced through the method according to claim 1 ~~any one of claims 1 to 4~~, that contains a filled skutterudite phase in an amount of at least 95 mass%.

6. (original): The filled skutterudite-based alloy according to claim 5, wherein it contains a filled skutterudite phase in an amount of at least 95 vol.% and further contains a phase, other than the filled skutterudite phase, having a maximum diameter of 10 μm or less.

7. (currently amended): The filled skutterudite-based alloy according to claim 5 ~~or claim 6~~, wherein it contains oxygen, nitrogen and carbon in a total amount of 0.2 mass% or less.

8. (currently amended): A thermoelectric conversion element fabricated using the filled skutterudite-based alloy according to claim 5 ~~any one of claims 5 to 7~~.

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9. (new): The method according to claim 2, wherein the alloy raw material is melted in an inert gas atmosphere at a pressure higher than atmospheric pressure of 0.1 MPa and not higher than 0.2 Mpa.

10. (new): The filled skutterudite-based alloy according to claim 6, wherein it contains oxygen, nitrogen and carbon in a total amount of 0.2 mass% or less.